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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,227	11/14/2001	Hans-Dieter Borowsky	HHI-033US	7538
959	7590	04/13/2005	EXAMINER	
LAHIVE & COCKFIELD, LLP. 28 STATE STREET BOSTON, MA 02109			HARVEY, DIONNE	
			ART UNIT	PAPER NUMBER
			2643	

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,227

Applicant(s)

BOROWSKY ET AL.

Examiner

Dionne N Harvey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1, 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Levin US 6,144,750** in view of **Gnecco US 5,640,457**.

Regarding claim 1, in **figures 3,10,13,18 and 25**, Levin teaches a treatment device for correcting impairments to hearing, comprising an *essentially* cylindrically shaped housing (shown); Levin teaches that the volume control dial **32** may be replaced by remote control means for controlling the volume, thereby reading on "free of external moving operational elements"; the housing having a battery compartment, **as indicated by battery compartment cover 34**, and a sound exit opening, **as is inherent and well understood in the art of hearing aid devices**; additionally, in **column 1, lines 50-52**, and in **column 3, lines 15-20**, Levin does not restrict to any particular material for constructing said device. Levin does not clearly teach that the housing is formed of metal and said metal housing shields an electronics unit located therein against electromagnetic waves.

In **column 1, lines 13-19**, Gnecco teaches an invention for use in ITC and CIC devices, such as the device disclosed by Levin, and further teaches in **column 3, lines 21-22**, that it is well known in the art to construct the housing of a treatment device such

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that it is formed of metal, and whereby the electronic units of the treatment device are shielded against electromagnetic waves. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Levin and Gnecco, modifying the housing of Levin such that it is constructed from metal and thereby shields the internal units from electromagnetic interference, thereby providing a hearing device which is not adversely affected by radio signals.

Regarding claim 7, The combination of Levin and Gnecco does not clearly teach that the housing is composed of titanium or a titanium alloy. However, it is well known in the art that titanium is a biocompatible material often used for constructing hearing devices intended for implantation. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to construct the housing of Levin/Gnecco from titanium, titanium alloy or another metal thereby providing a means for shielding internal electronics from electromagnetic interference, and also having biocompatible characteristics such that the housing's close contact with the wearer's skin will not cause irritation.

Regarding claim 8, Levin teaches retaining means 34 provided in the battery compartment to fix the position of the battery therein.

2. **Claims 2, 5 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Levin US 6,144,750** in view of **Gnecco US 5,640,457**, as applied to claim 1 above, and further in view of **Narisawa US 6,041,128**.

Regarding claim 2, The combination of Levin and Gnecco fails to clearly teach a battery compartment comprising a watertight seal from the rest of the housing.

In **column 8, lines 43-47**, Narisawa teaches a battery compartment (**see figure 12**) comprising a watertight seal **45** for preventing the entry of moisture into the rest of the housing. It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the teachings of Levin and Gnecco, per the teachings of Narisawa, thereby constructing the battery compartment of Levin such that it includes a watertight seal **45**, for the purpose of enabling the use of air-cell batteries in hearing devices wherein sufficient air entry is permitted without the undesired entry of moisture into the device interior.

Regarding claim 5, in **figure 13B**, Narisawa teaches that the housing comprises a first housing component **42** with a battery compartment **40A** being fastened together with a second housing component **40** and an O-ring seal **45** located there between.

Regarding claim 9, in **figure 8**, Narisawa teaches that the battery compartment further comprises a hole **42C** for allowing external access of air to the battery.

3. **Claim 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Levin US 6,144,750** in view of **Gnecco U.S. 5,640,457**, as applied to **claim 1** above, and further in view of **Meier US 6,574,343**.

Regarding claim 3, The combination of Levin and Gnecco does not clearly teach that a water tight film is used to seal the sound exit opening.

In **column 2, lines 55-57**, Meier teaches a device for use in In-ear hearing devices, and further teaches in **column 4, lines 60-62**, that a sound exit opening may be sealed by an acoustically transmitting, water tight film (also see **column 3, lines 53-56**).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Levin, Gnecco and Meier, providing the sound exit opening of the Levin device with a sealing film, for the purpose of preventing ear wax and other debris from penetrating the hearing device, **see column 1, lines 41-51, of Meier**.

4. **Claim 4 is** rejected under 35 U.S.C. 103(a) as being unpatentable over **Levin US 6,144,750** in view of **Gnecco US 5,640,457** in view of **Narisawa US 6,041,128**, as applied to claim 2 above, and further in view of **Meier US 6,574,343**.

Regarding claim 4, The combination of Levin and Gnecco and Narisawa does not clearly teach that a water tight film is used to seal the sound exit opening.

In **column 2, lines 55-57**, Meier teaches a device for use in In-ear hearing devices, and further teaches in **column 4, lines 60-62**, that a sound exit opening may be sealed by an acoustically transmitting, water tight film (also see **column 3, lines 53-56**).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Levin, Gnecco, Narisawa and Meier, providing the sound exit opening of the Levin device with a sealing film, for the purpose of preventing

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ear wax and other debris from penetrating the hearing device, **see column 1, lines 41-51, of Meier.**

5. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Levin US 6,144,750** in view of **Gnecco US 5,640,457**, as applied to **claim 8** above, and further in view of **Giannetti US 5,675,657**.

Regarding claim 10, the combination of Levin and Gnecco does not teach that the retaining means comprises a magnet.

Giannetti teaches that the retaining means **31** may include a magnet **45**. It would have been obvious for one of ordinary skill in the art at the time of the invention to alter the combined teachings of Levin and Gnecco, per the teachings of Giannetti, thereby equipping the retaining means **34** of Levin, with a magnet **45**, so that the battery will not fall away from the housing when the retaining means **34** is opened.

Allowable Subject Matter

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-5 and 7-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N Harvey whose telephone number is 571-572-7497. The examiner can normally be reached on 9-6:30 M-F and alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dionne Harvey


GEORGE ENG
PRIMARY EXAMINER